

WHAT IS CLAIMED IS:

1. An image forming apparatus comprising:
  - first storing means for storing image data;
  - judging means for dividing said image data stored in said first storing means into a plurality of blocks and making judgment upon whether all pixels are white in accordance with each of said divided blocks;
  - rotation processing means for performing rotation processing of image data of a block when it is determined that not all pixels in said block are white by said judging means;
  - controlling means for controlling to omit rotation processing of image data of a block when it is determined that all pixels are white in said block by said judging means;
  - compressing means for compressing image data of a block which skips rotation processing by said controlling means or image data of a block subjected to rotation processing by said rotation processing means and determining resulting data as code data; and
  - second storing means for storing said code data compressed by said compressing means.
2. The image forming apparatus according to claim 1, wherein said first storing means and said second storing means are provided for a page memory.
3. The image forming apparatus according to claim 1, wherein said judging means divides image data

into blocks in units of a plurality of lines in said image data.

4. The image forming apparatus according to  
claim 1, wherein said judging means divides image data  
5 into a plurality of blocks in units of 32-bit lines in  
said image data.

5. The image forming apparatus according to  
claim 1, wherein said rotation processing means carries  
out rotation processing in units of one cell with n  
10 bits  $\times$  n bits constituting a block being determined as  
one cell.

6. The image forming apparatus according to  
claim 1, wherein said rotation processing means  
performs rotation processing in units of one cell with  
15 32 bits  $\times$  32 bits constituting a block being  
determined as one cell.

7. The image forming apparatus according to  
claim 1, wherein said rotation processing means carries  
out rotation processing of 270 degrees in the clockwise  
20 direction in units of one cell with n bits  $\times$  n bits  
constituting a block being determined as one cell.

8. The image forming apparatus according to  
claim 1, wherein said rotation processing means  
performs rotation processing of 270 degrees in the  
25 clockwise direction in units of one cell with 32 bits  
 $\times$  32 bits constituting a block being determined as one  
cell.

9. The image forming apparatus according to  
claim 1, wherein said controlling means is a controller  
for controlling a page memory to which said first  
storing means and said second storing means are  
5 provided.

10. The image forming apparatus according to  
claim 1, wherein said compressing means performs  
compression using a Modified Modified READ Code.

11. An image forming apparatus comprising:  
10       first storing means for storing image data;  
            judging means for dividing said image data stored  
in said first storing means into a plurality of blocks  
and making judgment upon whether all pixels are white  
in accordance with each of said divided blocks;  
15       rotation processing means for performing rotation  
processing of image data of a block when it is  
determined that not all pixels in said block are white  
by said judging means;  
20       second storing means for storing image data of a  
block subjected to rotation processing by said rotation  
processing means;  
            controlling means for controlling to omit rotation  
processing of image data of a block when it is  
determined that all pixels in said block are white by  
25       said judging means;  
            compressing means for compressing image data of  
a block which skips rotation processing by said

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controlling means or image data of a block stored in said second storing means and determining resulting data as code data; and

5                   third storing means for storing said code data compressed by said compressing means.

12.          The image forming apparatus according to claim 11, wherein said first storing means, said second storing means and said third storing means are provided for a page memory.

10         13. An image forming apparatus which has compressing means for compressing image data and forms an image, said image forming apparatus comprising:

                  first storing means for storing image data;

15         judging means for dividing image data stored in said first storing means into a plurality of blocks, performing bit retrieval in accordance with each of said divided blocks, and making judgment upon whether all pixels of each of said blocks are white;

20         rotation processing means for performing rotation processing of image data of a block which is determined that not all pixels thereof are white by said judging means;

25         second storing means for storing image data of a block subjected to rotation processing by said rotation processing means;

                  first controlling means for performing bit retrieval of image data of a block stored in said

second storing means, compressing said image data by said compressing means, and determining resulting data as code data;

5 second controlling means for compressing by said compressing means image data of a block determined that all pixels thereof are white by said judging means, and determining resulting data as code data; and

10 third storing means for storing said code data controlled and compressed by said first controlling means or said code data controlled and compressed by said second controlling means.

15 14. The image forming apparatus according to claim 13, wherein said first storing means, said second storing means and said third storing means are provided for a page memory.

20 15. The image forming apparatus according to claim 13, wherein said first controlling means and said second controlling means are controllers for controlling a page memory to which said first storing means, said second controlling means and said third storing means are provided.